

ABSTRACT

A method for fabricating a semiconductor transistor including forming a first insulating layer on a semiconductor substrate; forming an LDD region using ion implantation; patterning the first insulating layer; forming a trench in the substrate; forming a trench gate by depositing and planarizing a second insulating layer and a conductor on the substrate with the trench formed therein; forming a photoresist pattern on the substrate; forming source/drain regions by performing an ion implantation using the photoresist pattern as a mask; and removing the photoresist pattern and the first insulating layer.

Thus, a method for fabricating a semiconductor transistor according to the present invention can reduce source/drain resistances and gate resistance by forming a trench type gate and can efficiently control a short channel effect.